

REMARKS

This responds to the Office Action mailed on January 9, 2008.

Claim 1, 4, 27, and 59 are amended, no claims are canceled, and no claims are added; as a result, claims 1-9, 27-33, and 59-66 are now pending in this application. The amendments to the claims are fully supported by the specification as originally filed. No new matter is introduced. Applicant respectfully requests reconsideration of the above-identified application in view of the amendments above and the remarks that follow.

Support for the amendments to claim 27 may be found in the specification, for example, at page 13, line 13 – page 14, line 19. Support for the amendments to claim 27 may be found in the specification, for example, at page 15, lines 12 – 23.

§102 Rejection of the Claims

Claims 27-31 and 33 were rejected under 35 U.S.C. § 102(e) for anticipation by Chung (U.S. 6,399,178). Applicant traverses these grounds of rejection of these claims.

Claim 27 is amended to clarify that after providing the adhesive layer, forming an array of conductive elements within the adhesive layer provides a combined structure that is an independent structure that can further be applied in the method of claim 27. Applicant cannot find in Chung a disclosure or a suggestion of a method of packaging that includes, after providing a substantially independent film-like adhesive layer, forming an array of conductive elements within the substantially independent film-like adhesive layer such the adhesive layer and the array of conductive elements form a structure essentially consisting of the adhesive layer and the array of conductive elements, as recited in amended claim 27. In contrast to the features of claim 27, Chung applies conductive elements to a substrate and then applies a sheet of an adhesive having opening to form a structure including a substrate with solder bumps on the substrate surrounded by adhesive. The substrate may be a semiconductor die within a semiconductor wafer.

Therefore, Applicant submits that Chung does not teach each and every claim element of claim 27, that Chung does not teach the identical invention in as complete detail as is contained in claim 27, and/or that Chung does not teach each and every claim element arranged as in claim

27. Thus, Applicant submits that Chung does not anticipate claim 27 and that claim 27 is patentable over Chung for at least the reasons stated above.

Claims 28-31 and 33 depend from claim 27. Applicant submits that claims 28-31 and 33 are patentable over Chung for at least the reasons stated above with respect to claim 27. Further, in view of the additional features of each of these dependent claims, Applicant respectfully submits that these claims may be allowable for one or more reasons in addition to and/or in alternative to those reasons identified above.

Applicant respectfully requests withdrawal of these rejections of claims 27-31 and 33, and reconsideration and allowance of these claims.

First §103 Rejection of the Claims

Claim 32 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Chung (U.S. 6,399,178) in combination with Yoshizawa (U.S. 5,819,406). Applicant traverses these grounds of rejection of this claim.

Combining Yoshizawa with Chung, as proffered in the Office Action, does not cure the deficiencies of citing Chung with respect to claim 27, as discussed above. Therefore, Applicant submits that claim 27 is patentable over Chung in combination with Yoshizawa. Claim 32 depends from claim 27. Applicant submits that claim 32 is patentable over Chung in combination with Yoshizawa for at least the reasons stated above with respect to claim 27. Further, in view of the additional features of this dependent claim, Applicant respectfully submits that this claim may be allowable for one or more reasons in addition to and/or in alternative to those reasons identified above.

Applicant respectfully requests withdrawal of these rejections of claim 32, and reconsideration and allowance of this claim.

Second §103 Rejection of the Claims

Claims 1-4, 6-9, 59-60, and 62-66 were rejected under 35 U.S.C. § 103(a) as being unpatentable over DeFelice et al. (U.S. 6,190,940) in combination with Gilileo et al. (U.S. 6,228,678) and Nguyen (U.S. 6,245,595). Applicant traverses these grounds of rejection of these claims.

Applicant cannot find in the combination of DeFelice et al. (hereafter DeFelice), Gilleo et al. (hereafter Gilleo) and Nguyen, as proffered in the Office Action, a disclosure or a suggestion of a wafer level process including controlling the application of the adhesive to the first side of the finished wafer, such that the adhesive substantially covers the entire first side of the finished wafer as a uniform adhesive layer, and aligning an array of conductive elements using one or more datums on the finished wafer, as recited in amended claim 1. Therefore, Applicant submits the combination of DeFelice, Gilleo, and Nguyen does not disclose or suggest all the elements of claim 1. For at least these reasons, Applicant submits that claim 1 is patentable over DeFelice in combination with Gilleo and Nguyen.

Applicant submits that claims 4 and 59 are patentable over DeFelice in combination with Gilleo and Nguyen for at least reasons similar to those stated above with respect to claim 1. Further, in view of the features of each of independent claims 4 and 59, Applicant respectfully submits that these independent claims may be allowable for one or more reasons in addition to and/or in alternative to those reasons identified above.

Claims 2 and 3, claims 6-9 and 65, and claims 60, 62-64, and 66 depend from independent claims 1, 4, and 59, respectively. Applicant submits that claims 2, 3, 6-9, 60, and 62-66 are patentable over DeFelice in combination with Gilleo and Nguyen for at least the reasons stated above with respect to claims 1, 4, and 59. Further, in view of the additional features of each of these dependent claims, Applicant respectfully submits that these claims may be allowable for one or more reasons in addition to and/or in alternative to those reasons identified above.

Applicant respectfully requests withdrawal of these rejections of claims 1-4, 6-9, 59-60, and 62-66, and reconsideration and allowance of these claims.

Third §103 Rejection of the Claims

Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over DeFelice et al. (U.S. 6,190,940), Gilleo et al. (U.S. 6,228,678) and Nguyen (U.S. 6,245,595) as applied to claim 4 and further in combination with Kim et al. (U.S. 6,903,451). Applicant traverses these grounds of rejection of this claim.

Combining Kim et al. (hereafter Kim) with DeFelice, Gilleo, and Nguyen, as proffered in

the Office Action, does not cure the deficiencies of citing DeFelice, Gilleo, and Nguyen with respect to claim 4, as discussed above. Therefore, Applicant submits that claim 4 is patentable over DeFelice, Gilleo, and Nguyen in combination with Kim. Claim 5 depends from claim 4. Applicant submits that claim 5 is patentable over DeFelice, Gilleo, and Nguyen in combination with Kim for at least the reasons stated above with respect to claim 4. Further, in view of the additional features of this dependent claim, Applicant respectfully submits that this claim may be allowable for one or more reasons in addition to and/or in alternative to those reasons identified above.

Applicant respectfully requests withdrawal of these rejections of claim 5, and reconsideration and allowance of this claim.

Fourth §103 Rejection of the Claims

Claim 61 was rejected under 35 U.S.C. § 103(a) as being unpatentable over DeFelice et al. (U.S. 6,190,940), Gilleo et al. (U.S. 6,228,678) and Nguyen (U.S. 6,245,595) as applied to claim 59 and further in combination with Yamaji et al. (U.S. 6,159,837). Applicant traverses these grounds of rejection of this claim.

Combining Yamaji et al. (hereafter Yamaji) with DeFelice, Gilleo, and Nguyen, as proffered in the Office Action, does not cure the deficiencies of citing DeFelice, Gilleo, and Nguyen with respect to claim 59, as discussed above. Therefore, Applicant submits that claim 59 is patentable over DeFelice, Gilleo, and Nguyen in combination with Yamaji. Claim 61 depends from claim 59. Applicant submits that claim 61 is patentable over DeFelice, Gilleo, and Nguyen in combination with Yamaji for at least the reasons stated above with respect to claim 59. Further, in view of the additional features of this dependent claim, Applicant respectfully submits that this claim may be allowable for one or more reasons in addition to and/or in alternative to those reasons identified above.

Applicant respectfully requests withdrawal of these rejections of claim 61, and reconsideration and allowance of this claim.

Reservation of Rights

Applicant does not agree with one or more comments in the instant Office Action. However, Applicant has limited the discussion of the traversal of the Office Action rejections to such discussion as is necessary to efficiently expedite the prosecution of the abovementioned application. Applicant reserves the right to further address the comments of the Examiner at a later date if necessary. Further, Applicant reserves the right to swear behind any cited reference.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 371-2157 to facilitate prosecution of this application.

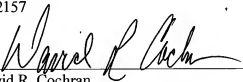
If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date 7 MARCH 2008

By


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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: MS AF, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 7th day of March 2008.

Name

Amy Moriarty

Signature

